DOCUMENT RESUME

ED 031 309

PS 002 059

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Maternal Behavior and the Development of Reading Readiness in Urban Negro Children.

Early Education Research Center, Chicago, Ill.; National Lab. on Early Childhood Education.
Spons Agency-Office of Education (DHEW), Washington, D.C. Div. of Educational Labs.
Report No-NLECE-70706-XG-9
Pub Date [69]
Contract-OEC-3-7-70706-3118
Note-28p.
EDRS Price MF-$0.25 HC-$1.50
Descriptors-Cognitive Development, Environmental Influences, *Family Environment, Language Fluency, Mother Attitudes, Motivation, *Negro Mothers, Parent Child Relationship, *Parent Influence, *Preschool Children, Reading Development, *Reading Readiness, Teaching Styles, Urban Environment

In this paper the effects of environmental influences upon the development of reading readiness in young children were discussed. It was assumed that the effects of social, cultural, and economic factors on a preschool child are mediated in a large part through adults closely involved with the child's life. One hundred sixty Negro mothers and their 4-year-old children, representing four social status levels, were selected as subjects. Observations of the subjects and questionnaire data showed that maternal behavior and physical environment do influence the child's early cognitive and academic development. Children were affected by (1) degree of crowding in the living quarters, (2) use of home resources by the mother to aid the child's cognitive growth, (3) amount of time a mother reads to a child, (4) mother's participation in outside activities, (5) mother's feelings of effectiveness in dealing with life, (6) regulation of behavior strategies used by the mother, (7) maternal teaching style when attempting to show the child how to do something, (8) mother's affective behavior, and (9) to some extent, the mother's own language facility. To the extent that these factors affect the child's cognitive development, they appear to include the motivational and other abilities involved in learning to read. (WD)

ED031309

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Document 70706-XG(9)

Maternal Behavior and the Development of Reading Readiness in Urban Negro Children

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The research or work reported herein was performed pursuant to a contract with the Office of Education, U.S. Department of Health, Education, and Welfare through the Chicago Early Education Research Center, a component of the National Laboratory on Early Childhood Education, contract OEC-3-7-70706-3118.

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MATERNAL BEHAVIOR AND THE DEVELOPMENT OF READING READINESS IN URBAN NEGRO CHILDREN

Of the various disadvantages to which the poor are subject, perhaps none is so crippling as the lack of facility in reading. The importance of the ability to read as prerequisite to subsequent education has, of course, been reflected in the design of programs of compensatory education. This concentration of attention upon the need to develop reading abilities in children from disadvantaged areas has obscured issues relating to the effect of family and community background upon the ability to learn to read print. This paper addresses this question of environmental influences upon the development of readiness for reading in young children.*

Many children from working-class homes, in contrast to those from middle-class homes, enter a metropolitan school system unprepared to undertake the typical first-grade curriculum. This discrepancy in school readiness, in the context of increasing interest in compensatory education, led to a study, described in this paper, of the preschool

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*The research reported in this paper was supported by Research Grant #R34 from the Children's Bureau, Social Security Administration, Department of Health, Education and Welfare; by the Ford Foundation Fund for the Advancement of Learning, and grants-in-aid from the Social Science Research Committee of the Division of Social Sciences, University of Chicago, by a grant from the Office of Economic Opportunity, Division of Research, Project Head Start, and from the U.S. Office of Education. My colleagues on this project are Dr. Virginia Shipman, Dr. Roberta Bear and Dr. Jere Brophy.

environments of children from varying social classes. The assumption of the study was that effects of social, cultural, and economic factors, whether helpful or hindering to a preschool child, are mediated in a large part through adults most salient in his life--usually, his mother. In a sense, the mother was viewed as a teacher, and her behaviors which affect the child's cognitive development and preparation for school were regarded as maternal teaching styles.

In its broadest perspective, the study inquired into the relationship between social structure and individual behavior, emphasizing functional connections between social and cultural conditions of various socioeconomic levels and motivation and ability for classroom learning. These connections may be usefully considered through describing: (1) the nature of the physical and social environment, (2) the effects of this environment upon adults, (3) adults' consequent interaction with children, and (4) the outcomes of these effects shown through children's behavior--e.g., cognitive skills, school achievement, patterns of interaction with the school, its rules, and its representatives. In line with the orientation of this study toward educationally disadvantaged children, the descriptions will center primarily on lower-working class urben Negroes.

The Nature of the Physical and Social Environment

The position of an individual in the socioeconomic hierarchy of a society is related to a wide range of characteristics and behaviors. In

this discussion, attention is focused upon those which seem to be most directly relevant for an analysis of the effects of the social environment upon educational achievement. Economic resources are not directly considered; their role is assumed as basic to many other areas of behavior.

Perhaps the most significant aspect of social structure is the degree of power or extent to which an individual can control his own life, implement his plans, and protect himself and his resources. It is in this area that the urban lower-working class Negro adults are the most disadvantaged. They are subject to exploitation; have difficulty defending the privacy of their homes against invasion, for example, by welfare agencies (Cloward & Piven, 1967); and more likely to be arrested and detained without justification. In addition, they tend to be diagnosed in mental health clinics as more maladjusted with poorer prognoses than middle-class patients with similar records (Haase, 1956; Riessman, 1964) and given inadequate treatment in hospital emergency wards (Sudnow, 1957).

This lack of power and economic resource creates for the working class urban Negro a vulnerability to disaster. The routes through which misfortune may strike are numerous: they are typically most likely to be unemployed with little warning, to be victimized by bureaucratic or legislative delay, and to be without financial resources, either of their own or from ready outside sources (Cloward & Elman, 1966).

Urban working class adults, especially Negroes, command relatively little prestige or esteem and are subjected to discrimination of varying degrees. This finds expression in occupational experiences that differ essentially from those of middle class adults. Semiskilled or unskilled workers are middle class adults. Semiskilled or unskilled workers are given little or ... part in the policy- or decision-making process; they carry out the decisions of others. This may be an inherent characteristic of a complex, industrialized occupational system and may be difficult, perhaps impossible, to modify (Kohn, 1963; Inkeles, 1960).

Lack of money, power, education, and prestige restricts the working-class person's available alternatives for action. He is caught in a cycle in which social reality and physical immobility reduce his opportunities for options concerning place of residence, education, employment and actions in other arenas of behavior.

Another contributing factor is the relatively small overlap between the experience of lower- and middle-class adults. Mass media portray the values, resources, and life style of the middle class, showing their vast differences from those of the lower class. Occasional superficial or formal contact and exchange confirm the differences in prestige, status, and experience underlying basic social class dissimilarities. This type of exposure and communication is not reciprocal; the lower-class adult is more often exposed to the middle-class way of life than is the middle

class adult to the lower class, especially that of the urban Negro. This lack of mutual understanding and experience is one of the features of discrimination and social alienation from middle class white institutions.

The Effects of Environment Upon Adults

The impact of environmental circumstances is to encourage and foster a number of adaptive responses, but despite the stereotypes about the poor, the effects of these external conditions upon individuals and families are by no means uniform. Consequently, there is great variation in the patterns of response that individuals acquire and express. For purposes of brevity, however, this discussion is concerned with general trends and tendencies that apply in different ways to individuals.

Working class adults tend to perceive and structure social relationships in terms of power. Whyte (1955) observed this tendency in his work with "street corner society"; it may underlie the greater incidence of physical punishment in lower class families (Bronfenbrenner, 1958). An orientation to power would seem to follow from the lower-class person's position in society. He has little voice in decisions affecting his daily life while those who have status and authority also have power. In line with this orientation, the lower class father tends to equate his children's respect with their compliance with his wishes and commands (Cohen & Hodges, 1963; Kohn, 1959).

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A cluster of attitudes expressing low esteem, a sense of inefficacy, and passivity are, perhaps, not so much stable lower class personality traits as they are responses to frustrations and unpredictability. Contingencies linking action to outcome are frequently missing or intermittent in the ghetto. One adaptation to this is to elect short term goals, seek more immediately predictable gratification (Davis, 1948), or resist and occasionally even use illicit means (delinquent behavior) to achieve usually unavailable rewards (Cloward & Ohlin, 1960).

Another adaptive consequence of lower life is an unusual degree of reliance upon non-work-related friendships and kinship contacts for social support. Institutions are not seen as sources of support, and the world of social contacts is divided into friends and strangers. From strangers, a lower class adult has no reason to expect fair or helpful treatment; friends are salient.

Another consequence of lower class life circumstances is to encourage a simplification of the experience world and a restriction of the range of linguistic modes of verbal exchange (Bernstein, 1961, 1964). This follows in part from the interlacing of language and behavior and from the limited behavioral alternatives in the lives of lower class persons. This does not imply that they speak less often or less effectively but that the patterning of their speech differs according to the nature of the interaction among them (Schatzman & Strauss, 1955).

Associated with his mistrust of the unfamiliar--indicating lack of confidence and fear of social blunders--is the lower class person's rejection of intellectuality. He feels unable to compete in unfamiliar modes of reasoning and is reluctant to accept standards of evaluation which would find him inadequate. The circumstances of his life orient him toward practical action rather than speculation and evaluation.

The relative isolation of the lower class person from middle class experience contributes to his limited skill in getting and judging information that does or might affect his life. His ignorance makes him gullible--a prey to commercials and persuasive salesmen--and susceptible to exploitation by individuals and agencies both within and outside of his own community.

Effects of Environment Upon Adults' (Mothers') Interaction With Children

Social and physical environments shape behavior and compel adaptations in adults which they (especially the mothers) then transmit purposefully and inadvertantly to their children. Later in a child's life, his environments will exert more direct influence on him, but when young, he takes his cues from his mother--whose behavior reflects her own ability to deal with the problems of her environment and expresses her own functioning intelligence.

In this project, the first focus was to identify in mothers of preschool children specific behaviors which mediate between their

environments and the development of cognitive ability and educability in their children. Educability, a general concept described more specifically in other papers (Hess & Shipman, in press), refers to a cluster of cognitive skills, motivation to learn in a school setting, and an orientation toward the roles of student, teacher, and school which affect measurably a child's ability to learn in a school setting.

(a) Research Plan. A research group of 160 Negro mothers and their four-year-old children was selected from four different social status levels: Group A, from college-educated professional, executive, and managerial occupations; Group B, from skilled blue-collar occupations; Group C, from unskilled or semiskilled occupations, with fathers present; and Group D, from unskilled or semiskilled occupations with fathers absent and family supported by public assistance. Each mother was interviewed twice in her home and then brought to the University for testing and an *interaction session with her child.*

The mother was taught three simple tasks by a staff member and then asked to teach them to her child. One task was to sort or group a number of plastic toys by color and function; the second, to sort eight blocks by two characteristics simultaneously; the third, to work with her child in copying five designs on a toy called the Etch-a-Sketch.

Measures of Cognitive Environment

Several aspects of the environment are considered relevant: (1) circumstances of the home and community environment, (2) mother's

orientation toward the non-family world, (3) mother's strategies for controlling the child, (4) mother's teaching techniques in an experimental situation, (5) maternal language, and (6) mother's affective interaction with the child. These may be described briefly as follows.

(1) Circumstances of the home and community environment. Data about the social and physical circumstances of the family were gathered by interviewing the mother about the family and its physical surroundings and her use of both physical resources and of opportunities for social interaction with institutions of the community. Included were data on length of residence in the city, educational background and other demographic information, type and adequacy of housing in relation to family size, composition of the family and other indications of the home and community surround.

(2) Maternal orientation toward the non-family world. Part of the cognitive environment provided for the child follows from the mother's view of herself and her relations to the institutions and opportunities of the community in which she lives. These attitudes are expressed in part through her participation in the organizations of the community and in her own feelings of effectiveness and ability to achieve goals she deems important. These attitudes are accompanied by a willingness to confront the environment rather than to surrender and accept passively the circumstances of her life. Such feelings also indicate a sense of faith and trust

in the integrity of action--that there are consequences which follow in some orderly way and that there is some point in setting goals and working toward them. These attitudes were assessed in the study through interview and questionnaire. Of the several measures developed, two are included in this paper: the total number of organized (as contrasted with informal, social) activities in which the mother participates in the community and an educational attitudes score, which indicates the mother's feeling of effectiveness (or powerlessness) in relation to the administrative structure of the public schools. Both of these measures show considerable social class differences, with middle class mothers reporting more participation in organizations of the community and also more feelings of effectiveness in relation to the local school (Hess & Shipman, 1968).

(3) Strategies of maternal control. Mothers exert control by various combinations of requesting, suggesting, arguing, commanding, pleading, scolding, and punishing. These techniques can be grouped into three general types of control depending on the type of response demanded from the child:

(a) Appeals to norms, status, and generally accepted rules and regulations (Imperative-Normative). The essential element of this strategy is that it accepts the status quo as appropriate and unquestionable. Such control is useful and necessary sometimes to inform the child about the authority structure and rules of the family, school, and more complex

institutions; but it asks for no thought or reflection by the child and may lead to a passive learning style when used exclusively first by the family and later by the teacher.

(b) Appeals to subjective, internal states of the child, the mother, or other persons with whom he interacts (Subjective-Personal). Statements such as "How would you feel if you were the teacher and the kids didn't mind?" call the child's attention to the effects of his behavior on others and himself. This strategy demands of the child a more complex cognitive process, role playing, and induces a less passive learning style, requiring attention to peers and authority figures and ability to see a situation from several vantage points.

(c) Appeals based on arguments relating to the task and on future consequences of the behavior (Cognitive-Rational). This strategy, based on a rationale of cause and effect, is much more complex than the previous two since it asks the child to project himself into the future or to another place and to reflect on long range effects of his behavior as compared to alternative actions. The child is asked to internalize cognitive control, providing himself with the general guidelines to apply to new situations.

Analysis of the interactions showed that mothers from the four social status groups varied in their tendencies to use a given control strategy more than the others. For example, middle class mothers used

the imperative technique approximately one-third as often as did mothers from working class groups.

(4) Maternal Teaching Styles. The last session of data gathering included the mothers' attempts to teach their children the three simple tasks they had previously been taught by a staff member. In the first two tasks, sorting toys by color or function and sorting blocks by two criteria (height and printed symbol), the mothers' activities were described in such terms as informing, engaging, orienting, and requesting physical feedback (asking the child for some specific physical response).

The third task involved the Etch-a-Sketch, a toy consisting of a screen on which lines may be drawn by manipulating two knobs. A mother was told to copy five designs by manipulating one knob herself and instructing her child to manipulate the other. Again, she was instructed to use only verbal cues. The effect of the mothers' teaching style can be described by the degree to which she uses two simple measures: showing the child a model of the design to be copied and giving him directions on how to turn the knob. Summaries of the mothers' teaching showed that middle class mothers used both teaching measures significantly more often than did working class mothers. (Use of the two measures and the intelligence scores of both mother and child correlated significantly with the child's performance scores.) Problems arising from

a lack of meaning in mother-child interactions were clearly exemplified during the task. A mother might demand that her child turn the knob but fail to explain why or relate his action to what appeared on the screen. She might not show him the model or give specific turning directions. Such techniques hinder the child in learning anything from one response to the next, yet his responses are rewarded or punished--without his knowing why. The parallel between this situation and the experimental designs used by Maier (1949) to deliberately produce frustration in sub-human organisms is strikingly close. In spite of a mother's good intentions, if she fails to inject sufficient cognitive meaning into her interaction with her child, she may structure a situation so that he not only fails to learn but develops a negative response toward learning per se.

Such communication failure may be a primary factor in the mother-child interaction patterns of disadvantaged children and have far reaching and cumulative effects on their cognitive development. A mother's teaching styles reflect her response to her own circumstances and induce in her child maladaptive learning styles and orientation to school and other social institutions.

(5) Maternal Language. The language samples were obtained from the mother in various ways and analyzed by a group of categories devised by Olim (1967) on the basis of studies by Loban (1963), Bernstein (1962),

and others. A number of specific language scales were used in this analysis and were later combined to form a single language factor score. In a general way, this score indicates the complexity of the mother's language and her facility in the use of standard English. It does not indicate her competence in the use of nonstandard dialects. However, since the reading readiness and achievement measures are based upon the use of standard English, it would be expected that the mother's language usage in this regard would influence the child's acquisition of reading skills.

(6) Affective Behavior of the Mother. In the past, studies of maternal behavior in relation to the emergence of various types of behavior in children has focused very heavily on affective dimensions. Schaefer (1961) argues on the basis of factor analysis of maternal attitudes and interaction scales that there are two dominant factors in maternal behavior--love-rejection and control autonomy. Although the focus of this study was upon the cognitive features of maternal behavior, scales evaluating mother's warmth were included in order to compare the relative effects of cognitive as contrasted with affective dimensions. In our data there were two measures of maternal warmth, one based on the rating of an interviewer who saw the mother in the home in interaction with the children and the other on the basis of her behavior in the teaching situation with the child.

(b) Research Results. Social class differences in reading readiness of the children. Differences in levels of performance between children from dissimilar socioeconomic levels, typical in the research literature on school achievement, appear in the data from the study. The data in Table 1 show that middle class Negro children performed at a higher level than did Negro children from working class backgrounds. There was also a significant difference between the level of reading readiness of children from skilled occupational levels in comparison to children whose parents work in unskilled occupations.

The Relation of Maternal Behavior to Reading Readiness

In several papers published and in press, the relationships between maternal variables and the performance of their children have been reported (Hess & Bear, 1968; Hess & Shipman, 1967, 1968, in press; Hess, Shipman, Brophy, & Bear, 1968; Olim, Hess & Shipman, 1967). The data presented in these articles show significant correlations between several facets of maternal behavior and the child's performance at age four on a block sorting task, object sorting task, IQ tests and behavior during the administration of the Binet. The data to be reported in this paper are thus an extension of findings into additional areas of performance on the part of the child. Perhaps the most significant aspect of these new data is the fact that they were obtained roughly two years after the measures of maternal behavior were taken. In addition, they represent measures of

Table 1

Social Class Differences in Reading Readiness Scores and Achievement in Grade 1

Measure	Social Status			
	Middle Class	Working Class		
		Skilled	Unskilled	
			Father Present	Father Absent
Lee-Clark Letter recognition	20.44	19.62	18.40	18.25
Lee-Clark Concept knowledge	17.64	16.57	16.16	15.98
Lee-Clark Symbol recognition	14.95	13.08	11.32	11.42
Lee-Clark Total Score	53.03	49.27	45.89	45.65
Metropolitan Reading Test score	80.32	67.43	63.78	63.18
Reading Grade Semester 1	7.7*	6.54*	6.84*	5.96*
Reading Grade Semester 2	8.5*	7.49*	7.41*	6.39*

* Transformation of assigned grades; range is from 2.0 (low) to 11.0 (high).

abilities which are predictive of success in school and thus offer an empirical tie between the maternal measures at the preschool level and later school performance of the child.

The hypotheses relevant to the impact of maternal behavior upon school performance came from the theoretical orientation of the project, as described earlier in this paper, and from the relationships found between maternal variables and child performance when the children of the study were four years of age. They may be grouped in six clusters of variables described earlier.

(a) Measures of home and community environment. Some of the variables reflecting aspects of family and community circumstances are presented in the data in Table 2. These are (1) an index of crowding indicated by the ratio of rooms to people in the home; (2) home resources score, a measure which combines a number of variables which reflect the mother's use of resources in the home (such as reading to the child, use of toys and other equipment to stimulate play, etc.), of space both within the house and in the neighborhood to maximize the child's cognitive growth. This measure is summarized in a fairly wide scope of types of behavior, some of which overlap with other variables reported in this paper.

As is evident in Table 2, variables which reflect the circumstances of the home and the mother's use of the resources of home and community

are related to the child's reading readiness scores and to later performance on a reading achievement test. The magnitude of these correlations varies--home resources scale being the most highly correlated. A number of other variables not reported here do not correlate with the child's reading readiness or his later test scores. Examples of these variables are whether or not the child engages in play which is unsupervised by the mother, the type of playmates available to him, and where in the house, yard, or neighborhood the child plays. Some other variables, such as the amount of time the mother reads to the child, the number of persons in the home, do correlate with either the reading readiness or the reading test scores giving a pattern of correlation that emphasizes the behavior of the mother and the degree of crowding of the family in its housing space.

(b) Maternal orientation toward the non-family world. In the measures reported here, the mother's participation in non-family organizations, excluding social visiting, and her attitudes toward the non-family world and her ability to deal with it are indicated in three measures: total number of memberships in community organizations, feelings of effectiveness in dealing with the school and other institutions in the community, and feelings that life has opportunities "to improve your life." All of these variables are correlated with reading readiness. The correlation between the mother's feelings of optimism and effectiveness and

reading readiness parallels the association of these measures with child performance measures at age four. It seems possible that the mother's belief that the world offers alternatives for action and possibilities of success in response to individual effort is transmitted to the child in ways that increase his alertness and attentiveness to the environment and a willingness to exercise his own abilities in attempting to deal with it. The correlation between the mother's activities in the community and the child's reading attainment in the first grade suggests that the mother's integration into the social institutions of her community, her readiness to confront and to engage in exchange with organizations of her neighborhood, provide the child with incentive or information and learning opportunities in ways that are not revealed by these data. Such opportunities are not available for children whose mothers tend to be isolated from the communities in which they live and who do not make use of the resources available to them. Thus, the initiative of the mother and her tendency to meet the environment and to enter into interaction with it appear to be important variables in the development of educability in the young child.

(c) Maternal control strategies. The strategies which mothers employ to regulate the behavior of their children were described earlier in this paper. These strategies were measured in several ways by analysis of protocols provided by the mothers of the sample in response to questions which inquired about what they would say to their children

Table 2
Correlation of Maternal and Environmental Measures with Measures of Reading Readiness (Total Group)

Maternal Variables	Lee-Clark Reading Readiness Total Score	Metro. Reading Readiness Score	Reading Sem. 1	Reading Sem. 2
Ratio of rooms to people	.24	.35	.20	.17
Home resources factor score	.36	.61	.35	.36
Number of group memberships	.35	.45	.27	.23
Powerlessness score (attitudes toward school)	.28	.36	.20	.28
View of life as offering opportunities	.28	.34	.17	.27
Imperative-Normative Control (First Day)	-.22	-.44	-.20	-.18
Imperative-Normative Control (Mastery Episodes)	-.20	-.33	-.23	-.21
Personal-Subjective Control (Mastery (Episodes)	.22	.35	.22	.24
Use of Model in Etch-a-Sketch	.28	.39	.22	.30
Use of Directions in Etch-a-Sketch	.27	.50	.22	.18
Orienting child to task (Block Sort Task)	.29	.36	.22	.21
Engaging Factor (Block Sort Task)	.27	.43	.19	.12
Specificity of Feedback to Child (Block Sort Task)	.18	.41	.29	.27
Request for Physical response (Block Sort Task)	-.39	-.45	-.35	-.31
Language Factor	.24	.37	.30	.29
Affective support of child (Interviewer's Rating)	.29	.51	.27	.30
Maternal Warmth (Block Sort Task)	.19	.20	.09	.03
Warmth Factor (Teaching Tasks)	.29	.28	.15	.12

Level of Significance: .17 to .21--significant at the 5% level.
.22 and above--significant at the 1% level.

before sending them off to the first day of school and what they would do if their children engaged in misconduct of various kinds as well as their response to hypothetical examples of the child's difficulty with either teachers or peers at school. The responses of the mothers were grouped into categories described as imperative, which indicate a tendency to impose norms of the system without giving rationale or to impose their own wishes in a like manner; status oriented statement, which indicate a readiness to support the rules and norms of the institutions of the community; and person oriented statements, which show an inclination to consider the individual qualities of the child, his inner states and attempts to see the child's behavior from his own perspective. The rationale for expecting these strategies of maternal control to effect the child's cognitive development are given in the preceding pages and elaborated in more detail in other papers (Hess & Shipman, 1967). The patterns of behavior on the part of mothers were related to the child's performance at age four and, as is clear from Table 2, are also related to the child's reading readiness and his reading achievement scores. The magnitude of these correlations varies from one type of measure to another but the directions are consistent. These results are consistent, also, with finding that children of age four whose mothers tend to use imperative control strategies were likely to use nonverbal responses on an object sorting task.

(d) Maternal teaching style. The measures representing mother's teaching behavior in the experimental tasks that were set up during the analysis of maternal behavior when the child was four years old showed correlations with the children's performance at the younger age levels and also with the child's reading readiness and reading achievement scores. A considerable number of measures of the mother's teaching behavior correlates significantly with the children's reading achievement; only a small number of these is presented in the table. These are her tendency to provide explicit direction in an Etch-a-Sketch situation, her tendency to show the child the model which was to be used in their joint efforts, her tendency to request physical feedback in asking the child to perform on the block sorting task (as contrasted with the request to respond verbally).*

(e) Maternal language. The development of reading skills is presumably closely related to the development of language, and one would expect a positive relationship between the mother's language facility and her child's reading readiness and reading achievement. The correlations obtained between this measure of linguistic ability and on the part of the

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*Some efforts have been made to train working class mothers to teach their children specific procedures which will help them learn to read. For an account of one such project, see Muskopf, Allan. Utilizing mothers to reinforce the schools's reading program for disadvantaged children. Unpublished doctoral dissertatation, University of Chicago, 1968.

mother and the children's performance are moderate and positive showing that there is indeed some association; however, the correlations are not as high as correlations with other maternal variables. This relative position of language factor as a predictive measure holds for the total sample of four social status groups and for a subsample of the working class group taken separately. The ecological variables, the mother's control strategies, and her teaching styles in the experimental teaching situation correlate at a comparable level or higher than do the language measures. This may be in part an indication that the measures we used were not adequate; the interpretation that seems most plausible in view of the theoretical orientation of this study is the maternal language is one of a cluster of behaviors and circumstances that affect the child's positive development and perhaps has been overestimated in terms of its effect on the verbal capabilities of the young child. This is a tentative conclusion, however, and one which obviously must await further study by other investigators before definitive conclusions can be reached about the impact of mother's linguistic behavior.

(f) Affective behavior of the mother. Table 2 shows the relationship of these behaviors to the child's reading readiness and achievement scores. It is clear that both are very highly related, ranking along with other maternal behavior in the magnitude of the correlation with the children's scores. The ratings by the interviewer are correlated at a

higher level than the ratings of maternal warmth in the teaching sessions. This raises the possibilities that the interviewer's ratings were based on a wider range of behavior that may have included some of the items that are categorized here as teaching styles or other cognitive aspects of the mother's interaction with the child.

Summary

It was the intent of this paper to illustrate ways in which the social structure of society is connected with the cognitive performance of the individuals in the structure. This linkage appears to be operating through dimensions of prestige and power which give the mother a degree of freedom and opportunity in her own behavior and place her in a position to give her child opportunities to select among alternatives of action and thought, thus allowing him to make discriminations, to see his own behavior as related to consequences and to expect that his efforts to learn will be rewarded. Maternal behavior and cultural background thus appear to be influential through various avenues of behavior upon the child's early cognitive and academic development. To the extent that these affect the child's cognitive development, they appear to include the motivational and other abilities involved in learning to read.

References

Bernstein, B. Social class and linguistic development: a theory of social learning. In A. H. Halsey et al. (Eds.), Economy, education and society. New York: Free Press of Glencoe, 1961, 288-314.

Bernstein, B. Linguistic codes, hesitation phenomena and intelligence. Language and Speech, 1962, 5, 31-46.

Bernstein, B. Elaborated and restricted codes: their social origins and some consequences. In J. Gumperz, & D. Hymes (Eds.), The ethnography of communication. American Anthropologist Special Publication, 1964, 66, No. 6, Part 2, 55-69. (Reprinted in A. G. Smith (Ed.), Communication and Culture. New York: Holt, 1966, 427-441.)

Bronfenbrenner, U. Socialization and social class through time and space. In E. E. Maccoby, T. M. Newcomb, & E. L. Hartley (Eds.), Readings in social psychology. New York: Holt, 1958.

Cloward, R. A. & R. M. Elman. Poverty, injustice, and the welfare state. The Nation, Part 1, February, 1966.

Cloward, R. A. & L. E. Ohlin. Delinquency and opportunity. Glencoe: Free Press, 1960.

Cloward, R. A. & F. F. Piven. Birth of a Movernent. The Nation, May, 1967.

Cohen, A. & H. Hodges. Characteristics of the lower-blue-collar class. Social Problems, 1963, 10(4).

Davis, A. Social class influence upon learning (The Inglis Lecturer). Cambridge: Harvard University Press, 1948.

Haase, W. Rorschach diagnosis, socio-economic class, and examiner bias. Unpublished doctoral dissertation, New York University, 1956.

Hess, R. D. & R. M. Bear (Eds.). Early education. Chicago: Aldine, 1968.

Hess, R. D. & V. C. Shipman. Cognitive elements in maternal behavior. In J. P. Hill (Ed.), Minnesota Symposia on Child Psychology, Volume I, Minneapolis: University of Minnesota Press, 1967.

Hess, R.D. & V.C. Shipman. Maternal attitudes toward school and the role of the pupil: some social class comparisons. In A.H. Passow (Ed.), Developing programs for the educationally disadvantaged. New York: Teachers College, in press.

Hess, R.D., V.C. Shipman, J. Brophy, & R.M. Bear. Cognitive environments of urban preschool Negro children. Report to the Children's Bureau, Social Security Administration, HEW, 1968.

Inkeles, A. Industrial man: the relation of status to experience, perception, and value. The American Journal of Sociology, 1960, LXVI (1), 1-31.

Kohn, M.L. Social class and parental values. The American Journal of Sociology, 1959, 64, 337-351.

Kohn, M.L. Social class and parent-child relationships: an interpretation. The American Journal of Sociology, 1963, LXVII (4), 471-480.

Loban, W.D. The language of elementary school children. Champaign, Illinois: National Council of Teachers of English, 1963.

Maier, N.R.F. Frustration, the study of behavior without a goal. New York: McGraw-Hill, 1949.

Muskopf, A. Utilizing mothers to reinforce the school's reading program for disadvantaged children. Unpublished doctoral dissertation, University of Chicago, 1968.

Olim, E.G. The relationship between mothers' language styles and the cognitive styles and IQs of urban pre-school children. Unpublished doctoral dissertation, The University of Chicago, 1965.

Olim, E.G., R.D. Hess & V.C. Shipman. Role of mother's language styles in mediating their pre-school children's cognitive development. School Review, 1967, 75, 414-424.

Riessman, F. New approaches to mental health treatment for labor and low income groups. New York: National Institute of Labor Education, Mental Health Program, 250 West 57th Street, New York, 19, New York, February, 1964.

Schaefer, E.S. Converging conceptual models for maternal behavior and for child behavior. In Glidewell (Ed.), Parental attitudes and child behavior. Springfield, Illinois: Charles C. Thomas, 1961.

Schatzman, L. & A. Strauss. Social class and modes of communication. American Journal of Sociology, 1955, 60, 329-338. (Reprinted in A.G. Smith (Ed.), Communication and culture. New York: Holt, 1966, 442-455.)

Sudnow, D. Dead on arrival. Transaction, 1957, 5, 36-43.

Shyte, W.F. Street corner society; the social structure of an Italian slum. Chicago: University of Chicago Press, 1955.